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Pulp and Paperboard Division  
Environmental Department

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Department of Environmental Quality  
State Air Program

CERTIFIED MAIL: 7005 1160 0001 0583 1082

November 30, 2006

Mr. Dan Pitman  
Air Quality Permit Coordinator  
Idaho Department of Environmental Quality  
1410 North Hilton  
Boise, Idaho 83706-1255

P-060309 +  
77-060210

**Re: Facility ID No. 069-00001, Potlatch Corporation, Lewiston, Idaho  
Request Permit to Construct (PTC) Application**

Dear Mr. Pitman:

Potlatch Forest Products Corporation owns and operates the Idaho Pulp and Paperboard Division in Lewiston, Idaho. Potlatch is requesting IDEQ to revise a PTC issued on August 29, 1997 for the noncondensable gas incinerator to reflect current applicable requirements.

This control equipment was upgraded in 1998 to increase retention time. As a result of this upgrade, numerous conditions in the 1997 PTC are no longer applicable. In order to reduce confusion regarding the emissions that are being regulated, the proposed permit is referring to the LVHC collection and treatment system, to reflect the terminology used in Part 63 rules. In addition, the kilns are also part of this system. The applicable requirements for the treatment of LVHC gases in a lime kiln are also incorporated into this permit. As a separate project Potlatch intends to request a revision to the Kiln PTC issued in 2003 to remove the duplicative and inapplicable conditions relating to the treatment of LVHC gases.

The legacy monitoring systems (CEMs and CERMS) for this system are near the end of their useful life and will require an estimated \$50,000 to upgrade. In addition, the existing annual maintenance costs of the legacy monitoring systems exceed \$70,000 according to EPA's CEM cost estimator. Annual testing of the legacy systems is required in the 1<sup>st</sup> quarter of 2007, therefore an expedited permit review is requested to avoid these unnecessary costs. Potlatch proposes to update the legacy monitoring systems to those currently required by NSPS, MACT rules, and CAM.

Enclosed please find two (2) copies of Potlatch Corporation's Permit to Construct (PTC) application for the LVHC collection and treatment system. Due to the complex regulatory nature of this request, the application is in the form of a draft permit and regulatory review. A permit application fee of \$1,000 is enclosed as required by IDAP 58.01.01.224.

Potlatch request that the PTC provision for the LVHC collection and treatment system project be incorporated into the operating permit in accordance with the administrative permit amendment procedures in IDAPA 58.01.01.381.901.e referring to IDAPA 58.01.01.209.05.c.

In accordance with IDAPA 58.01.01.123 (*Rules for the Control of Air Pollution in Idaho*), I, Frank Radle, certify based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and completed.

Please contact Sue Somers at (208) 799-4104 with any questions regarding this PTC application.

Respectfully,

J. Frank Radle  
IPP Mill Manager

**Potlatch Forest Products Corporation**  
A WHOLLY OWNED SUBSIDIARY OF POTLATCH CORPORATION

803 Mill Road / P.O. Box 1126 / Lewiston, ID 83501-1126  
F (208)799-1788 / [www.potlatchcorp.com](http://www.potlatchcorp.com)

LVHC collection and treatment system  
 Regulatory review  
 November 27, 2006

This PTC regulates the emissions of LVHC (low volume high concentration gases) from 12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporators, Turpentine System and Foul Condensate Collection Tank. The evaporators commenced construction after September 24, 1976 and are therefore subject to 40 CFR Part 60 Subpart BB. At startup the evaporators met the requirements of subpart BB by incinerating the gases in a lime kiln.

In the early 1990's an incinerator was installed to provide more reliable treatment of LVHC gases. At that time a PTC was issued that included the applicable portions of subpart BB along with additional requirements to limit the PTE of SO<sub>2</sub> to avoid PSD requirements. At that time worst case calculations determined that the incinerator retention time was 0.33 seconds. In 1998, the incinerator combustion chamber was replaced with a larger chamber that is more than 3 times the volume of the original resulting in a retention time of more than 1 second. As a result of this improvement in retention time portions of subpart BB cited in the previous PTC are no longer applicable. This PTC includes the currently applicable requirements of subpart BB.

The 12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporators, Turpentine System and Foul Condensate Collection Tank are subject to the applicable provisions of 40 CFR Part 63, Subpart A - *General Provisions* and 40 CFR Part 63, Subpart S - *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*.

This PTC includes the applicable requirements of Part 63, subpart S.

In addition to these requirements limits to avoid PSD applicability for SO<sub>2</sub> are included as well as monitoring requirements for SO<sub>2</sub> that have been designed to meet the requirements of CAM when this permit is incorporated into the facilities Tier 1 permit

A detailed discussion of the changes made to the previous PTC is provided below for each permit condition in the previous permit. Previous conditions are shown in *italics*.

## 1. EMISSION LIMITS

### 1.1 SO<sub>2</sub> Emission Limits

*Sulfur dioxide (SO<sub>2</sub>) emissions from the noncondensable gas incinerator/packed bed absorber stack shall not exceed any emission rate limits listed in Appendix A of this permit. The pound per hour (lb/hr) SO<sub>2</sub> emission rate limit is a three (3)-hour rolling average pound per hour emission rate limit.*

Appendix A indicated a 4.7 lb per hour and 20 ton per year limit. There is no regulatory basis for the short term limit. The requirement to operate the SO<sub>2</sub> scrubber and the scrubber monitoring effectively limits both short term and annual emissions of SO<sub>2</sub>. The 20 Ton per year limit is requested to avoid PSD, (40 CFR 52.21) Compliance with the annual SO<sub>2</sub> limit will be demonstrated by taking the most recent SO<sub>2</sub> lb per hour source test result and multiplying it by the monthly incinerator operating hours

and maintaining scrubber operating parameters.. This monthly value will then be added to the pervious 11 months of values to determine the rolling annual total. Therefore, this condition has been replaced with new condition 2.6.

### *1.2 TRS Emission Limits*

*Total reduced sulfur (TRS) emissions from the noncondensable gas incinerator/packed bed absorber stack shall not exceed five (5) parts per million by volume on a dry basis, corrected to ten percent(10%) oxygen in accordance with 40 CFR 60.283(a)(1). The TRS emission concentration limit is a twelve (12)hour average emission limit pursuant to 40 CFR 60.284(c).*

Since the incinerator was upgraded to meet a 0.5 second retention time, the requirements of 40 CFR 60.283(a)(1)(iii) apply. There is no longer a regulatory basis for this limit and it has been deleted.

### *1.3 Opacity Limits*

*Visible emissions from the incinerator/packed bed absorber stack shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three(3) minutes in any sixty (60)-minute period as required in IDAPA 16.01.01.625(Rules for the Control of Air Pollution in Idaho) and as determined using theDEQ's "Procedures Manual for Air Pollution Control."*

This condition has been replaced with DEQ current standard language for IDAPA 58.01.01.625 and is now condition 2.3

## **2. OPERATING REQUIREMENTS**

### *2.1 Incinerator Temperature*

*Temperature of the incinerator shall be maintained at or above 1,200°F at all times when waste gases are being supplied to the incinerator.*

This requirement did not have a regulatory basis in the previous permit. Currently, since the incinerator was upgraded to meet a 0.5 second retention time, the requirements of 40 CFR 60.283(a)(1)(iii) apply. Therefore the requirement is retained in permit condition 2.5.

### *2.2 Packed Bed Absorber Operation*

*The packed bed absorber shall be installed, operated and maintained according to the manufacturer's recommendations. Within sixty (60) days of the performance tests required by Section 3.3 of this permit, the permittee may submit an operations manual providing alternative operation and maintenance requirements for the packed bed absorber to the DEQ for approval. If the operations manual is approved by the DEQ, it will be incorporated into this permit through the issuance of an addendum.*

The intent of this condition is now included in condition 2.11 and 2.15 requiring operation of the scrubber and compliance assurance monitoring.

### *2.3 NCG Sources*

*Noncondensable gases originating from the kraft pulp mill's batch digesters, continuous digesters, multiple-effect evaporator system, brownstock washers and condensate stripper system shall be thermally oxidized exclusively in either the incinerator or in a lime kiln.*

This condition has been updated by conditions 2.5 and 2.7. Condition 2.7 includes MACT requirements. Collection of gases form the Foul condensate system collection tank are now included.

### 3. MONITORING REQUIREMENTS

#### 3.1 TRS CEMS

The permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) to monitor and record the concentration of TRS emissions, on a dry basis, and a CEMS to monitor and record the percent of oxygen(O<sub>2</sub>) by volume, on a dry basis, in the gases discharged into the atmosphere from the incinerator/packed bed absorber stack pursuant to 40 CFR 60.284(a)(2). The TRS CEMS and O<sub>2</sub> CEMS shall be used directly for determining compliance with TRS emission concentrations given in Section 1.2 of this permit.

3.1.1 The installation and initial performance evaluations of the O<sub>2</sub> CEMS and the TRS CEMS shall be done in accordance with 40 CFR 60, Appendix B, Performance Specification 3, and 40 CFR 60, Appendix B, Performance Specification 5, respectively. Pursuant to 40 CFR 60.13(c), the permittee shall conduct the initial performance evaluations of the O<sub>2</sub> CEMS and the TRS CEMS during the performance test required in Section 3.3.2 of this permit, or within thirty (30) days thereafter.

3.1.2 The quality assurance requirements specified in 40 CFR 60, Appendix F, are hereby required to be applicable to the O<sub>2</sub> CEMS and the TRS CEMS.

3.1.3 Pursuant to 40 CFR 60.13 (e), the O<sub>2</sub> CEMS and the TRS CEMS shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments. In addition, each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15)-minute period.

3.1.4 The permittee shall maintain a file containing measurement data and related information for the O<sub>2</sub> CEMS and a similar file for the TRS CEMS. The respective data and information in each file shall include, but not be limited to, all CEMS output data, copies of all performance evaluation reports, daily calibration drift check data, written quality control procedures, documentation of all adjustments and maintenance on the CEMS, and copies of all information required to be submitted to the DEQ regarding the CEMS. The contents of the files shall be recorded in a permanent form suitable for inspection and shall be retained at the facility for at least two (2) years following the date on which such data or information were recorded. Each file shall be made available to DEQ representatives upon request and shall be used to determine when noncondensable gases are combusted in the incinerator.

Since the incinerator was upgraded to meet a 0.5 second retention time, the requirements of 40 CFR 60.283(a)(1)(iii) apply. There is no longer a regulatory basis for the TRS CEM. Applicable monitoring requirements are now in permit condition 2.13 and 2.14. Applicable operating requirements are in conditions 2.5 and 2.7.

#### 3.2 SO<sub>2</sub> CERMS

The permittee shall install, calibrate, maintain and operate a continuous emissions rate monitoring system (CERMS) to monitor and record the rate of SO<sub>2</sub> emissions to the atmosphere from the incinerator/packed bed absorber stack. The span value for the SO<sub>2</sub> concentration monitor portion of the SO<sub>2</sub> CERMS shall be 300 ppm, or a DEQ-approved alternative value. The SO<sub>2</sub> CERMS shall be used directly for determining compliance with SO<sub>2</sub> emission rates listed in Appendix A.

3.2.1 The installation and initial performance evaluation of the SO<sub>2</sub> CERMS shall be done in accordance with 40 CFR 60, Appendix B, Performance Specification 2, and 40 CFR 60, Appendix B, Performance Specification 6. The permittee shall conduct the initial performance evaluation of the SO<sub>2</sub> CERMS during the performance test required in Section 3.3.1 of this permit, or within thirty (30) days thereafter.

3.2.2 The quality assurance requirements specified in 40 CFR 60, Appendix F are hereby required to be applicable to the SO<sub>2</sub> CERMS.

3.2.3 The SO, CERMS shall be in continuous operation except for system breakdowns, repairs, calibration checks and zero and span adjustments. In addition, CERMS shall complete a minimum of one (1) cycle of operation(sampling, analyzing, and data recording) for each successive fifteen(15) - minute period.

3.2.4 The permittee shall maintain a file containing measurement data and related information for the SO, CERMS including, but not limited to, all CERMS output data, copies of all performance evaluation reports, daily calibration drift check data, written quality control procedures, documentation of all adjustments and maintenance on the CERMS, and copies of all information required to be submitted to the DEQ regarding the CERMS. The contents of the files shall be recorded in a permanent form suitable for inspection and shall be retained at the facility for at least two (2) years following the date on which such data or information were recorded. Each file shall be made available to DEQ representatives upon request, and shall be used to determine when the noncondensable gases are combusted in the incinerator.

The SO<sub>2</sub> cerms monitoring has been replaced with the monitoring requirements in condition 2.15, and SO<sub>2</sub> testing requirements in condition 2.16.

Compliance with the annual SO<sub>2</sub> limit will be demonstrated by taking the most recent SO<sub>2</sub> lb per hour source test result and multiplying it by the monthly incinerator operating hours. This monthly value will then be added to the pervious 11 months of values to determine the rolling annual total.

### 3.3 SO<sub>2</sub> and TRS Performance Tests

Performance tests shall be performed in accordance with General Provision F, with the exception that the production rate limitations of General Provision F do not apply, to demonstrate compliance with:

3.3.1 Section 1.1 of this permit, for SO<sub>2</sub>. The performance test shall be conducted in accordance with 40 CFR 60 Appendix A, Methods 1 through 4 and Method 6, or DEQ approved alternatives. The performance test shall be conducted during a period when a batch digester blows and when the condensate stripper expels gas to the noncondensable gas handling system if the condensate stripper is installed at the time that the performance test is required. If the condensate stripper is not installed at the time that the performance test is required, then a second performance test shall be conducted as above within sixty (60) days of achieving maximum production after installation of the condensate stripper, but no more than one hundred eighty (180) days after startup of the condensate stripper. Scrubbing media flow rate and scrubbing media Ph shall be monitored and recorded during the performance test.

The SO<sub>2</sub> cerms monitoring has been replaced with the monitoring requirements in condition 2.15, and SO<sub>2</sub> testing requirements in condition 2.16.

3.3.2 Section 1.2 of this permit, for TRS. The performance test shall be conducted in accordance with 40 CFR 60 Appendix A, Methods 1 through 4 and Method 16, or DEQ-approved alternatives. The performance test shall be conducted during a period when a batch digester blows and when the condensate stripper expels gas to the noncondensable gas handling system if the condensate stripper is installed at the time that the performance test is required. If the condensate stripper is not installed at the time that the performance test is required, then a second performance test shall be conducted as above within sixty (60) days of achieving maximum production after the startup of the condensate stripper but no more than one hundred eighty (180) days after the startup of the condensate stripper. The incinerator combustion chamber temperature shall be monitored and recorded during the performance test.

Since the incinerator was upgraded to meet a 0.5 second retention time, the requirements of 40 CFR 60.283(a)(1)(iii) apply. There is no longer a regulatory basis for the TRS CEM. Applicable

monitoring requirements are now in permit condition 2.13 and 2.14. Applicable operating requirements are in conditions 2.5 and 2.7

#### 3.4 Incinerator Temperature Monitoring

*An incinerator temperature monitoring device shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications to continuously measure and record the temperature of the incinerator combustion chamber. The monitor shall initially be certified by the manufacturer to be accurate within one percent (\*1%) of the temperature being measured. The temperature monitoring device shall be installed at the point of incineration of the effluent gases. Continuous temperature monitoring records shall be maintained on-site for the most recent two (2) -year period and shall be made available to DEQ representatives upon request.*

Temperature monitoring requirements are in permit conditions 2.13 and 2.14.

#### 3.5 TRS Concentration

*The permittee shall calculate and record on a daily basis twelve (12)-hour average TRS concentrations and correct these concentrations to ten percent (10%) oxygen by volume as specified in 40 CFR 60.284 (c) . These records shall be maintained on-site for the most recent two (2) -year period and shall be made available to DEQ representatives upon request.*

Since the incinerator was upgraded to meet a 0.5 second retention time, the requirements of 40 CFR 60.283(a)(1)(iii) apply. There is no longer a regulatory basis for this condition and it has been deleted.

### 4.0 REPORTING AND RECORDKEEPING REQUIREMENTS

#### 4.1 RA and RATA Test Protocols

*Test protocols shall be submitted for the initial relative accuracy (RA) test and the first annual relative accuracy test audit (RATA) for the 0, and TRS CEMS and the SO, CERMS required in Sections 3.1 and 3.2, respectively, of this permit for DEQ approval at least thirty (30) days prior to the test date. For each subsequent annual RATA for the 0, and TRS CEMS and the SO, CERMS required in Sections 3.1 and 3.2 of this permit, the permittee shall submit a notification to the DEQ in writing at least thirty (30) days prior to the test date that states the date when the test will occur and identifies which approved protocol will be used for the test. New test protocols shall be submitted for DEQ approval for any annual RATA after any changes are made to the process at least thirty (30) days prior to the test date for the 02, and TRS CEMS and the SO, CERMS required in Sections 3.1 and 3.2 of this permit.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### 4.2 RA and RATA Test Reports

*The reporting requirements specified in 40 CFR 60, Appendix B, Performance Specification 2, Section 9, and 40 CFR 60, Appendix B, Performance Specification 3, Section 1.1, and 40 CFR 60, Appendix B, Performance Specification 5, Section 1.1, and 40 CFR 60, Appendix B, Performance Specification 6, Section 1.1, and 40 CFR 60, Appendix F, Section 7, shall be submitted to the DEQ within thirty (30) days of the date on which the corresponding RA test or RATA is completed.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### 4.3 Quality Control Procedures

*The permittee shall submit to the DEQ copies of the written quality control procedures, specified in 40 CFR 60, Appendix F, Section 3, for the 02 CEMS, the TRS CEMS, and the SO<sub>2</sub> CEMS at least thirty(30) days prior to the date of the respective initial RA test.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### *4.4 Performance Test Protocols*

*The permittee shall submit a test protocol for each performance test required in Section 3.3 of this permit to the DEQ for approval at least thirty (30) days prior to each test date. Each performance test report, including the required process data, shall be submitted to the DEQ within thirty (30) days of the date on which the performance test is conducted.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### *4.5 TRS Excess Emissions Reports*

*The permittee shall submit to the DEQ copies of all excess emissions and monitoring systems performance reports and/or summary reports required by 40 CFR 60.7(b) through (d) and IDAPA 16.01.01.131 for TRS emissions. Excess TRS emissions are defined as in 40 CFR 60.284 (d)(3)(i) .*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### *4.6 SO<sub>2</sub> Excess Emissions Reports*

*The permittee shall submit to the DEQ excess emissions and monitoring systems performance reports and/or summary reports for the SO<sub>2</sub> CEMS. The reporting requirements and report format shall comply with 40 CFR 60.7(b) through (d) and IDAPA 16.01.01.131. Excess SO<sub>2</sub> emissions are defined as SO<sub>2</sub> emissions with a three (3) -hour rolling average pound-per-hour (lb/hr) value greater than the pound-per-hour (lb/hr) emission limit listed in Appendix A.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.

#### *4.7 Annual SO<sub>2</sub> Report*

*The permittee shall submit an annual report based on a calendar year listing the tons of SO<sub>2</sub> that emitted from the incinerator/scrubber stack for the year. The report is due by January 30 of each year, and may be included as part of the fourth quarter report.*

This condition has been replaced by the currently applicable reporting requirements in Conditions 2.16, 2.17 and 2.18.



**Air Quality  
PERMIT TO CONSTRUCT**

**State of Idaho  
Department of Environmental Quality**

**PERMIT No.:** P-050208

**FACILITY ID No.:** 069-00001

**AQCR:** 062

**CLASS:** A

**SIC:** 2812

**ZONE:** 11

**UTM COORDINATE (km):** 501.9, 5141.3

**1. PERMITTEE**

Potlatch Forest Products Corporation; Pulp and Paperboard Division

**2. PROJECT**

LVHC collection and treatment system

**3. MAILING ADDRESS**

P.O. Box 1126

**CITY**

Lewiston

**STATE**

ID

**ZIP**

83501-1126

**4. FACILITY CONTACT**

Sue Somers

**TITLE**

Environmental Engineering Manger

**TELEPHONE**

(208) 799-4104

**5. RESPONSIBLE OFFICIAL**

Frank Radle

**TITLE**

Plant Manager

**TELEPHONE**

(208) 799-1561

**6. EXACT PLANT LOCATION**

803 Mill Road, Lewiston, Idaho

**COUNTY**

Nez Perce

**7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**

Pulp and paperboard manufacturing

**8. GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.

\_\_\_\_\_  
TONI HARDESTY, DIRECTOR  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**DATE ISSUED:** Proposed

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## Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
m	meter(s)
MACT	Maximum Achievable Control Technology
MMBtu/hr	million British thermal units per hour
MMscf	million standard cubic feet
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
psig	pounds per square inch
PTC	permit to construct
SIC	Standard Industrial Classification
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-050208**

<b>Permittee:</b>	Potlatch Forest Products	<b>Facility ID No.:</b> 069-00001	<b>Date Issued:</b>	Proposed
<b>Location:</b>	Lewiston			

**1. PERMIT TO CONSTRUCT SCOPE*****Purpose***

The purpose of this permit to construct (PTC) is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho for 12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporator, Turpentine System and Foul Condensate Collection Tank.

***Regulated Sources***

1.2 Table 1.1 lists all sources of regulated emissions in this PTC.

**Table 1.1 SUMMARY OF REGULATED SOURCES**

<b>Permit Section</b>	<b>Source Description</b>	<b>Emissions Control(s)</b>
2	12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporator, Turpentine System and Foul Condensate Collection Tank	Incinerator and SO2 scrubber with #4 lime kiln and SO2 scrubber as backup, and #3 lime kiln as backup

**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-050208**

<b>Permittee:</b>	Potlatch Forest Products	<b>Facility ID No.:</b> 069-00001	<b>Date Issued:</b>	Proposed
<b>Location:</b>	Lewiston			

**2. 12 BATCH DIGESTERS, AND NO. 1 AND NO. 2 M&D DIGESTERS; EVAPORATOR, TURPENTINE SYSTEM AND FOUL CONDENSATE COLLECTION TANK**

**2.1 Process Description**

These systems produce pulp and process pulping liquors and produce LVHC (low volume high concentration) gases. These gases are also referred to as NCG's (non-condensable gases).

**2.2 Emissions Control Description**

**Table 2.1 EMISSIONS UNIT DESCRIPTIONS**

<b>Emissions Unit(s) / Process(es)</b>	<b>Emissions Control Device</b>
12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporator, Turpentine System and Foul Condensate Collection Tank generating LVHC gases	Incinerator and SO2 scrubber with #3 and #4 lime kilns as backup

***Emissions Limits***

**2.3 Opacity Limit**

Emissions from the stacks of the incinerator shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

**2.4 PM - Fuel Burning Equipment**

The permittee shall not discharge to the atmosphere from any gaseous fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume in accordance with IDAPA 58.01.01.676-677.

**[IDAPA 58.01.01.676-677, 4/5/00]**

**2.5 NSPS Requirements**

For the Batch digesters, and evaporator system The gases are combusted with other waste gases in an incinerator or other device, or combusted in a lime kiln or recovery furnace not subject to the provisions of subpart BB, and are subjected to a minimum temperature of 1200 degrees F for at least 0.5 second.

**[40 CFR 60.283(a)(1)(iii)]**

**2.6 PSD avoidance Limits**

When LVHC gases are combusted in the incinerator SO2 emissions will not exceed 20 tons per year

**[40 CFR 52.21 Avoidance]**

When LVHC gases are combusted in No. 3 or No. 4 Lime Kiln the SO2 emissions will not exceed 36 tons per year combined.

**[40 CFR 52.21 Avoidance]**

**AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-050208**

<b>Permittee:</b>	Potlatch Forest Products	<b>Facility ID No.:</b> 069-00001	<b>Date Issued:</b>	Proposed
<b>Location:</b>	Lewiston			

**2.7     MACT Requirements**

For 12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporator, Turpentine System and Foul Condensate Collection Tank the permittee shall comply with the applicable emission standards and other requirements under 40 CFR Part 63 Subparts A and S.

[IDAPA 58.01.01.591, 5/1/94; 40 CFR 63 Subpart S]

***Operating Requirements***

**2.8     NSPS operating requirements for the 12 Batch digesters and Evaporator system**

The gases are combusted with other waste gases in an incinerator or other device, or combusted in a lime kiln or recovery furnace not subject to the provisions of subpart BB, and are subjected to a minimum temperature of 1200 degrees F for at least 0.5 second.

[40 CFR 60.283(a)(1)(iii)]

**2.9     MACT operating requirements for the 12 Batch Digesters, and No. 1 and No. 2 M&D Digesters; Evaporator, Turpentine System and Foul Condensate Collection Tank,**

The thermal oxidizer shall reduce HAP emissions by one of the following three options (except as otherwise allowed by 40 CFR Part 63 Subpart S): (1) reduce total HAP emissions by 98 percent or more by weight; or (2) reduce the total HAP concentration at the outlet to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or (3) be designed and operated at a minimum temperature of 1,600 °F and a minimum residence time of 0.75 seconds.

[IDAPA 58.01.01.591, 5/1/94, 40 CFR 63.443(d)]

**2.10    Fuel Types**

The incinerator shall be fired with natural gas and LVHC gases exclusively.

[IDAPA 58.01.01.211.01, 5/1/94]

**2.11    SO2 PSD avoidance operating requirements for the incinerator and No. 4 Lime Kiln**

Associated SO2 scrubbers will be operated when LVHC gases are combusted in the incinerator or No. 4 Lime Kiln.

[40 CFR 52.21 Avoidance]

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## ***Monitoring and Recordkeeping Requirements***

### **2.13 MACT Monitoring Requirements**

A continuous monitoring system (CMS) shall be operated in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of 63.443(d)(1) through (d)(3). Owners and operators complying with the HAP concentration requirements in 63.443(d)(2) may install a CMS to monitor the thermal oxidizer outlet total HAP or methanol concentration, as an alternative to monitoring thermal oxidizer operating temperature.

**[40 CFR 63.453(b)]**

### **2.14 NSPS Monitoring Requirements**

A monitoring device which measures and records the combustion temperature at the point of incineration where the provisions of 60.283(a)(1)(iii) apply.

**[40 CFR 60.284(b)(1)]**

### **2.15 SO<sub>2</sub> scrubber monitoring Requirements**

2.15.1 The permittee shall operate the Thermal Oxidizer SO<sub>2</sub> Scrubber with a scrubber liquor flow and pH at or above the readings determined to ensure compliance with the annual SO<sub>2</sub> limit. Scrubber flow and pH indicators will be based on 3-hour block averages.

**[IDAPA 58.01.01.211.01.c]**

2.15.2 The permittee shall install and operate a scrubber recirculation flow monitor and pH monitor at to verify recirculation flow and pH. The permittee shall keep daily records in a log kept of the two monitor's readings. Records shall be kept on-site, made available to Department personnel upon request.

**[IDAPA 58.01.01.211.01.c]**

2.15.3 The permittee shall only combust LVHC gases in 4 lime kiln when the SO<sub>2</sub> Scrubber with a scrubber liquor flow and pH at or above the readings determined to ensure compliance with the annual SO<sub>2</sub> limit. Scrubber flow and pH indicators will be based on 3-hour block averages.

**[IDAPA 58.01.01.211.01.c]**

2.15.4 The permittee shall install and operate a scrubber recirculation flow monitor and pH monitor to verify recirculation flow and pH. The permittee shall keep records of the two monitor's readings. Records shall be kept on-site, made available to Department personnel upon request.

**[IDAPA 58.01.01.211.01.c]**

### **2.16 Testing requirements**

Conduct testing for SO<sub>2</sub> from the incinerator, No. 4 Lime Kiln and No. 3 Lime Kiln while combusting LVHC gases to verify compliance with the annual emission limits and to establish scrubber parameters. If the calculated annual emissions are less than 50% of the standard, test every 5 years. If the emissions measured are between 50% and 75% of the standard, test every 3 years.

**[IDAPA 58.01.01.211.01, 5/1/94]**

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***Reporting Requirements***

**2.16 NSPS Reporting Requirements**

Reports will be made as required by the applicable requirements of 40 CFR 60.7(c). For the purposes of reports required under 40 CFR 60.7(c), emissions from any digester, or evaporator system periods of excess emissions from the batch digesters or evaporator system are all periods in excess of 5 minutes and their duration during which the combustion temperature at the point of incineration is less than 1200 degrees F.

**[40 CFR 60 Subpart A and Subpart BB, 40 CFR 60.284(d)(3)(ii)]**

**2.17 MACT Reporting Requirements**

Reports will be made as required by the applicable requirements of 40 CFR 63 Subpart A and Subpart S. Periods of excess emissions reported under 63.455 shall not be a violation of 63.433(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:

- a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and
- b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
- c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and the HVLC systems.

**[40 CFR 63 Subpart A and Subpart S, 40 CFR 63.443(e)]**

**2.18 Scrubber Reporting Requirements**

Excursions for the indicator ranges established for the incinerator SO<sub>2</sub> scrubber and the No. 4 lime kiln scrubber will be reported semiannually.

**[IDAPA 58.01.01.211.01.c]**

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**3. PERMIT TO CONSTRUCT GENERAL PROVISIONS**

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
  - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
  - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

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7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.